

What Is Claimed Is:

1. A device for classifying at least one object in the surrounding field of a vehicle with the aid of an environmental sensor system (10), wherein the device is configured so that the device classifies the at least one object on the basis of its three-dimensional shape and its dimensions; the environmental sensor system (10) ascertaining the shape and the dimensions.
2. The device as recited in Claim 1, wherein during the classification, the device also takes into account the velocity of the at least one object according to magnitude and/or direction.
3. The device as recited in Claim 1 or 2, wherein during the classification, the device additionally takes into account the orientation of the at least one object.
4. The device as recited in one of the preceding claims, wherein the device checks the validity of the classification, using data from a database.
5. The device as recited in one of the preceding claims, wherein the device is coupled to at least one vehicle system (15) in such a manner, that the device controls the at least one vehicle system (15) as a function of the classification.
6. The device as recited in Claim 5, wherein the vehicle system (15) is a protection system.
7. The device as recited in Claim 5, wherein the vehicle system is a driver-assistance system.

8. The device as recited in one of the preceding claims, wherein the environmental sensor system (10) includes a stereoscopic camera and/or a monoscopic camera having a stereo motion sensor, and/or a LIDAR sensor, and/or a scanning radar sensor.